CLAIMS

1. An emergency evacuation device for lowering an individual comprising:

a housing including a mounting structure;

a spool assembly mounted on the mounting structure within the housing, the spool assembly including a rotatably mounted spool designed to receive a length of high tensile strength line;

a centrifugal brake coupled to the spool for rotation with the spool;

a locking device carried by the housing and moveable between a spool locking position wherein the locking device engages the spool and a spool unlocking position; and

two-hand releasing handle apparatus positioned adjacent locking device and mounted so as to selectively provide movement of the locking device into one of the spool locking position and the spool unlocking position.

2. An evacuation device as claimed in claim 1 wherein the spool is mounted on an axle for rotation with the axle, the

spool assembly includes first gears attached adjacent opposite ends of the axle for rotation with the axle and the spool, and the centrifugal brake is coupled to the axle by second gears that mesh with the first gears.

3. An evacuation device as claimed in claim 2 wherein the spool includes a line receiving drum spaced coaxially from the axle by radially extending spokes, the drum having a substantially larger diameter than the axle.

4. An evacuation device as claimed in claim 2 wherein one of the first gears and the second gears includes worm gears.

5. An evacuation device as claimed in claim 1 wherein the centrifugal brake includes a centrifugal clutch constructed to maintain a speed of descent at a predetermined speed.

6. An evacuation device as claimed in claim 5 wherein the centrifugal brake includes an adjustment for setting engagement speed of the centrifugal brake.

7. An evacuation device as claimed in claim 1 wherein the locking device includes at least one locking pin positioned adjacent a side of the spool and engages the spool in the spool locking position in which the spool is prevented from rotating and is disengaged from the spool in the spool unlocked position in which the spool is free to rotate.

8. An evacuation device as claimed in claim 7 wherein the at least one locking pin includes a pair of locking pins, one each positioned adjacent opposite sides of the spool and each having a spool locking position in which the spool is prevented from rotating and a spool unlocked position in which the spool is free to rotate.

9. An evacuation device as claimed in claim 8 wherein the two-hand releasing handle apparatus includes a pair of opposed handles pivotally mounted for movement into one of a collapsed orientation and an extended orientation.

10. An evacuation device as claimed in claim 9 wherein the pair of opposed handles pivotally mounted for movement into one of a collapsed orientation and an extended orientation are coupled together for simultaneous movement.

11. An evacuation device as claimed in claim 8 wherein the pair of opposed handles is further positioned to engage the pair of locking pins and move the pair of locking pins into the locking position when the pair of opposed handles is moved into the collapsed orientation.

12. An evacuation device as claimed in claim 11 wherein each of the pair of locking pins is spring biased into the unlocked position when the pair of opposed handles is moved into the extended orientation.

13. An emergency evacuation device for lowering an individual comprising:

a housing including a mounting structure;

a spool assembly mounted on the mounting structure within the housing, the spool assembly including a rotatably mounted spool designed to receive a length of high tensile strength line;

a centrifugal brake coupled to the spool for rotation with the spool; and

a pair of opposed handles rotatably mounted for movement into one of a collapsed orientation and an extended orientation.

14. An emergency evacuation device as claimed in claim 13 further including a locking device carried by the housing and moveable between a spool locking position wherein the locking device engages the spool and a spool unlocking position, and the pair of opposed handles being positioned to engage the locking device and move the locking device into the locking position when the pair of opposed handles is moved into the collapsed orientation and further positioned to disengage the

locking device when the pair of opposed handles is moved into the extended orientation.

15. An evacuation device as claimed in claim 14 wherein the locking device includes at least one locking pin positioned adjacent a side of the spool and engages the spool in the spool locking position in which the spool is prevented from rotating and is disengaged from the spool in the spool unlocked position in which the spool is free to rotate.

16. An evacuation device as claimed in claim 15 wherein the at least one locking pin includes a pair of locking pins, one each positioned adjacent opposite sides of the spool and each having a spool locking position in which the spool is prevented from rotating and a spool unlocked position in which the spool is free to rotate.

17. An emergency evacuation device as claimed in claim 13 wherein the centrifugal brake is coupled to the spool at one side of the spool for rotation with the spool and the evacuation device further includes a second centrifugal brake coupled to the spool at an opposite side of the spool for rotation with the spool and constructed to maintain the rotation speed of the spool at the predetermined speed.

18. An emergency evacuation device for lowering an individual comprising:

a housing including a mounting structure;

a spool assembly mounted on the mounting structure within the housing, the spool assembly including a rotatably mounted spool designed to receive a length of high tensile strength line;

a first centrifugal brake coupled to the spool at one side of the spool for rotation with the spool and constructed to maintain a rotation speed of the spool at a predetermined speed;

a second centrifugal brake coupled to the spool at an opposite side of the spool for rotation with the spool and constructed to maintain the rotation speed of the spool at the predetermined speed;

a pair of locking pins one each positioned adjacent opposite sides of the spool and each having a spool locking position in which the spool is prevented from rotating and a spool unlocked position in which the spool is free to rotate, and each of the pair of locking pins being spring biased into the unlocked position; and

a pair of opposed handles rotatably mounted for movement into one of a collapsed orientation and an extended orientation, the pair of opposed handles being positioned to engage the pair of locking pins and move the pair of locking pins into the locking position when the pair of opposed handles is moved into the collapsed orientation and further positioned to disengage the pair of locking pins when the pair of opposed handles is moved into the extended orientation.

19. An evacuation device as claimed in claim 18 wherein the spool is mounted on an axle for rotation with the axle, the spool assembly includes first gears attached adjacent opposite ends of the axle for rotation with the axle and the spool, and the first and second centrifugal brakes are each coupled to the axle by second gears that mesh with the first gears.

20. An evacuation device as claimed in claim 19 wherein the spool includes a line receiving drum spaced coaxially from the axle by radially extending spokes, the drum having a substantially larger diameter than the axle.

21. An evacuation device as claimed in claim 19 wherein one of the first gears and the second gears includes worm gears.

22. An evacuation device as claimed in claim 18 wherein each of the first and second centrifugal brakes includes an adjustment for setting engagement speed of each of the first and second centrifugal brakes.